

To: Travers, David[Travers.David@epa.gov]
From: Harvey, David E (IHS/HQ)
Sent: Fri 1/10/2014 7:47:48 PM
Subject: RE: EPA Emergency Response Desk Open for WV Spill?

Will do.

From: Travers, David [mailto:Travers.David@epa.gov]
Sent: Friday, January 10, 2014 2:46 PM
To: Harvey, David E (IHS/HQ)
Subject: RE: EPA Emergency Response Desk Open for WV Spill?

Sure, let Kevin T know if you have any further questions...

From: Harvey, David E (IHS/HQ) [mailto:David.Harvey@ihs.gov]
Sent: Friday, January 10, 2014 2:43 PM
To: Travers, David
Subject: RE: EPA Emergency Response Desk Open for WV Spill?

Thanks for sharing. I'll keep it close.

From: Travers, David [mailto:Travers.David@epa.gov]
Sent: Friday, January 10, 2014 2:37 PM
To: Harvey, David E (IHS/HQ); Lopez-Carbo, Maria
Subject: RE: EPA Emergency Response Desk Open for WV Spill?

D, I assume you know this, but the report below is for internal EPA use...I sent it to you as a courtesy so please do not forward.

From: Harvey, David E (IHS/HQ) [mailto:David.Harvey@ihs.gov]
Sent: Friday, January 10, 2014 2:36 PM
To: Travers, David; Lopez-Carbo, Maria
Subject: RE: EPA Emergency Response Desk Open for WV Spill?

Thanks. HHS just held a conference call to give their agencies situational awareness of the incident. If there is any actionable information that comes following this meeting I'll let you know.

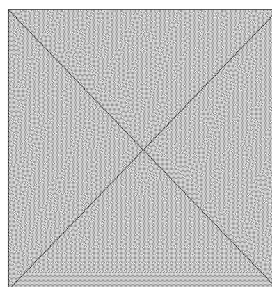
David

From: Travers, David [<mailto:Travers.David@epa.gov>]
Sent: Friday, January 10, 2014 2:04 PM
To: Lopez-Carbo, Maria; Harvey, David E (IHS/HQ)
Subject: RE: EPA Emergency Response Desk Open for WV Spill?

Dave, here's the complete report:

This report is being sent as a bcc to prevent accidental Reply to All messages.

UNCLASSIFIED//FOR OFFICIAL USE ONLY



**EOC Spot Report: Chemical Spill, Charleston WV – Update
#2**

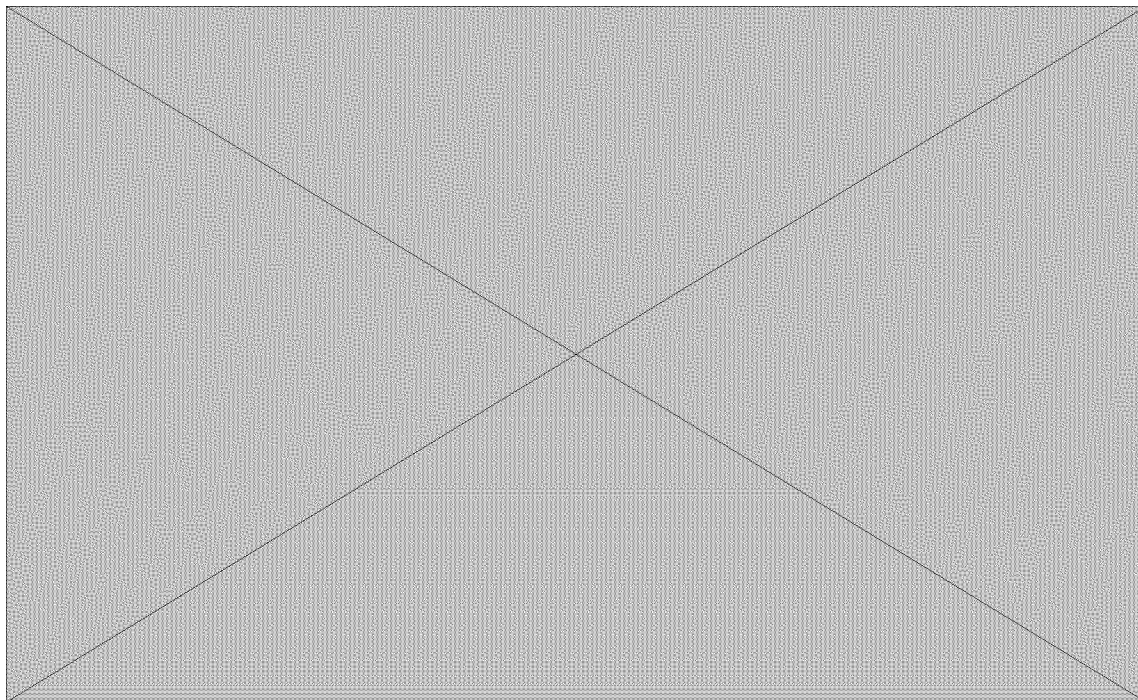
US Environmental Protection Agency

Report as of 1100 January 10, 2014

Overview: On January 10, the President approved an Emergency Declaration for the State of West Virginia after a chemical leaked through a secondary containment area at a Freedom Industries chemical plant and into the Elk River in Charleston, WV (pop. 51,018) (NRC#1070627.). The chemical (4-methycyclohexane methanol) is a flammable solvent used in the coal preparation process and is an irritant to eyes, respiratory system, and skin. The West Virginia Office of Environmental Health Services (OEHS) estimates no more than 5,000 gallons of chemical leaked in the Elk River. Based on river flow dilution, officials calculate the chemical concentration in the water to be well below the CDC declared safe level. A statement from West Virginia American Water said the company is monitoring the water. The spill occurred near the Kanawha Valley Water Treatment Plant. The Kanawha Valley Water Treatment Plant detected the chemical even after the increased carbon treatment effort was put in place. Freedom Industries is working to clean up the spill at the facility and in the river.

The Elk River is an area that has been designated a “Critical Habitat” for the Diamond Darter which is a freshwater fish listed as an endangered species. Located about 30 miles to the southeast of Charleston are the Gauley River National Recreation Area and the New River Gorge National River. As of this morning, there have been no reported impacts to these areas at this time.

State, Local and other Federal Agency Actions: West Virginia water authorities have issued a “Do Not Use Water Notice” for 10 counties (Kanawha, Boone, Putnam, Lincoln, Logan, Clay, Roane, Jackson Cabell and Wayne) and the President’s Emergency Declaration covers eight counties (Kanawha, Boone, Putnam, Lincoln, Logan, Clay, Roane, and Jackson). A shelter-in-place was not launched for the area at this time, but residents are urged to stay inside. WVAV customers are told not to use tap water for drinking, cooking, washing, or bathing. Water can be used for toilets and fire emergencies. Boiling water will not get rid of the chemical. This is believed to impact 100,000 customers (300,000 people). Schools in 7 of the affected counties will be closed Friday 1/10/2014.



The West Virginia Emergency Operations Center is fully activated and the state has activated their Health Operations Center. The FEMA Region III Regional Response Coordination Center (RRCC) is activated to Level II (Partial) and the FEMA Region III Liaison Officer and Incident Management Assistance Team have been deployed.

FEMA reports that initial shipments of drinking water will begin arriving this morning.

The IMAAC was activated and produced a modeling product which has been shared with the RRCC.

EPA Actions: An EPA OSC is en route to the WV EOC. A mission assignment has been issued to staff the ESF-10 desk Regional Response Coordination Center (RRCC) in Philadelphia; a R3 representative is staffing that desk.

Media Interest: High

<http://usnews.nbcnews.com/news/2014/01/09/22245996-west-virginia-chemical-spill-cuts-water-to-up-to-300000-state-of-emergency-declared?lite>

<http://www.chicagotribune.com/news/sns-rt-us-usa-westvirginia-spill-20140109,0,5360274.story>

UNCLASSIFIED//FOR OFFICIAL USE ONLY

<mailto:eoc.epahq@epa.gov>

Figure 1. The effect of the concentration of the polymer solution on the gelation time. The gelation time was measured at 30°C. The concentration of the polymer solution was 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 9.0, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 10.0, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 11.0, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9, 12.0, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8, 12.9, 13.0, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9, 14.0, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 15.0, 15.1, 15.2, 15.3, 15.4, 15.5, 15.6, 15.7, 15.8, 15.9, 16.0, 16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7, 16.8, 16.9, 17.0, 17.1, 17.2, 17.3, 17.4, 17.5, 17.6, 17.7, 17.8, 17.9, 18.0, 18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7, 18.8, 18.9, 19.0, 19.1, 19.2, 19.3, 19.4, 19.5, 19.6, 19.7, 19.8, 19.9, 20.0, 20.1, 20.2, 20.3, 20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 21.0, 21.1, 21.2, 21.3, 21.4, 21.5, 21.6, 21.7, 21.8, 21.9, 22.0, 22.1, 22.2, 22.3, 22.4, 22.5, 22.6, 22.7, 22.8, 22.9, 23.0, 23.1, 23.2, 23.3, 23.4, 23.5, 23.6, 23.7, 23.8, 23.9, 24.0, 24.1, 24.2, 24.3, 24.4, 24.5, 24.6, 24.7, 24.8, 24.9, 25.0, 25.1, 25.2, 25.3, 25.4, 25.5, 25.6, 25.7, 25.8, 25.9, 26.0, 26.1, 26.2, 26.3, 26.4, 26.5, 26.6, 26.7, 26.8, 26.9, 27.0, 27.1, 27.2, 27.3, 27.4, 27.5, 27.6, 27.7, 27.8, 27.9, 28.0, 28.1, 28.2, 28.3, 28.4, 28.5, 28.6, 28.7, 28.8, 28.9, 29.0, 29.1, 29.2, 29.3, 29.4, 29.5, 29.6, 29.7, 29.8, 29.9, 30.0, 30.1, 30.2, 30.3, 30.4, 30.5, 30.6, 30.7, 30.8, 30.9, 31.0, 31.1, 31.2, 31.3, 31.4, 31.5, 31.6, 31.7, 31.8, 31.9, 32.0, 32.1, 32.2, 32.3, 32.4, 32.5, 32.6, 32.7, 32.8, 32.9, 33.0, 33.1, 33.2, 33.3, 33.4, 33.5, 33.6, 33.7, 33.8, 33.9, 34.0, 34.1, 34.2, 34.3, 34.4, 34.5, 34.6, 34.7, 34.8, 34.9, 35.0, 35.1, 35.2, 35.3, 35.4, 35.5, 35.6, 35.7, 35.8, 35.9, 36.0, 36.1, 36.2, 36.3, 36.4, 36.5, 36.6, 36.7, 36.8, 36.9, 37.0, 37.1, 37.2, 37.3, 37.4, 37.5, 37.6, 37.7, 37.8, 37.9, 38.0, 38.1, 38.2, 38.3, 38.4, 38.5, 38.6, 38.7, 38.8, 38.9, 39.0, 39.1, 39.2, 39.3, 39.4, 39.5, 39.6, 39.7, 39.8, 39.9, 40.0, 40.1, 40.2, 40.3, 40.4, 40.5, 40.6, 40.7, 40.8, 40.9, 41.0, 41.1, 41.2, 41.3, 41.4, 41.5, 41.6, 41.7, 41.8, 41.9, 42.0, 42.1, 42.2, 42.3, 42.4, 42.5, 42.6, 42.7, 42.8, 42.9, 43.0, 43.1, 43.2, 43.3, 43.4, 43.5, 43.6, 43.7, 43.8, 43.9, 44.0, 44.1, 44.2, 44.3, 44.4, 44.5, 44.6, 44.7, 44.8, 44.9, 45.0, 45.1, 45.2, 45.3, 45.4, 45.5, 45.6, 45.7, 45.8, 45.9, 46.0, 46.1, 46.2, 46.3, 46.4, 46.5, 46.6, 46.7, 46.8, 46.9, 47.0, 47.1, 47.2, 47.3, 47.4, 47.5, 47.6, 47.7, 47.8, 47.9, 48.0, 48.1, 48.2, 48.3, 48.4, 48.5, 48.6, 48.7, 48.8, 48.9, 49.0, 49.1, 49.2, 49.3, 49.4, 49.5, 49.6, 49.7, 49.8, 49.9, 50.0, 50.1, 50.2, 50.3, 50.4, 50.5, 50.6, 50.7, 50.8, 50.9, 51.0, 51.1, 51.2, 51.3, 51.4, 51.5, 51.6, 51.7, 51.8, 51.9, 52.0, 52.1, 52.2, 52.3, 52.4, 52.5, 52.6, 52.7, 52.8, 52.9, 53.0, 53.1, 53.2, 53.3, 53.4, 53.5, 53.6, 53.7, 53.8, 53.9, 54.0, 54.1, 54.2, 54.3, 54.4, 54.5, 54.6, 54.7, 54.8, 54.9, 55.0, 55.1, 55.2, 55.3, 55.4, 55.5, 55.6, 55.7, 55.8, 55.9, 56.0, 56.1, 56.2, 56.3, 56.4, 56.5, 56.6, 56.7, 56.8, 56.9, 57.0, 57.1, 57.2, 57.3, 57.4, 57.5, 57.6, 57.7, 57.8, 57.9, 58.0, 58.1, 58.2, 58.3, 58.4, 58.5, 58.6, 58.7, 58.8, 58.9, 59.0, 59.1, 59.2, 59.3, 59.4, 59.5, 59.6, 59.7, 59.8, 59.9, 60.0, 60.1, 60.2, 60.3, 60.4, 60.5, 60.6, 60.7, 60.8, 60.9, 61.0, 61.1, 61.2, 61.3, 61.4, 61.5, 61.6, 61.7, 61.8, 61.9, 62.0, 62.1, 62.2, 62.3, 62.4, 62.5, 62.6, 62.7, 62.8, 62.9, 63.0, 63.1, 63.2, 63.3, 63.4, 63.5, 63.6, 63.7, 63.8, 63.9, 64.0, 64.1, 64.2, 64.3, 64.4, 64.5, 64.6, 64.7, 64.8, 64.9, 65.0, 65.1, 65.2, 65.3, 65.4, 65.5, 65.6, 65.7, 65.8, 65.9, 66.0, 66.1, 66.2, 66.3, 66.4, 66.5, 66.6, 66.7, 66.8, 66.9, 67.0, 67.1, 67.2, 67.3, 67.4, 67.5, 67.6, 67.7, 67.8, 67.9, 68.0, 68.1, 68.2, 68.3, 68.4, 68.5, 68.6, 68.7, 68.8, 68.9, 69.0, 69.1, 69.2, 69

From: Lopez-Carbo, Maria
Sent: Friday, January 10, 2014 2:02 PM
To: Harvey, David E (IHS/HQ)
Cc: Travers, David
Subject: RE: EPA Emergency Response Desk Open for WV Spill?

Hey, here is the answer. I'm included David Travers since he is more in the loop! Thanks.

The West Virginia Emergency Operations Center is fully activated and the state has activated their Health Operations Center. The FEMA Region III Regional Response Coordination Center (RRCC) is activated to Level II (Partial) and the FEMA Region III Liaison Officer and Incident Management Assistance Team have been deployed. Region 3 has deployed to the RRCC

From: Harvey, David E (IHS/HQ) [<mailto:David.Harvey@ihs.gov>]
Sent: Friday, January 10, 2014 1:59 PM
To: Lopez-Carbo, Maria
Subject: EPA Emergency Response Desk Open for WV Spill?

CAPT David Harvey, P.E., M.P.H.

Deputy Director

Indian Health Service

Sanitation Facilities Construction Program

Rockville, MD

Tel. (301) 443-0159

***** ATTACHMENT NOT DELIVERED ***** This Email message contained an attachment named image001.jpg which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted. This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name. For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

***** ATTACHMENT NOT DELIVERED *****

***** ATTACHMENT NOT DELIVERED ***** This Email message contained an attachment named image001.jpg which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted. This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name. For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

***** ATTACHMENT NOT DELIVERED *****

***** ATTACHMENT NOT DELIVERED *****

This Email message contained an attachment named image001.jpg which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name.

For further information, please contact the EPA Call Center at

(866) 411-4EPA (4372). The TDD number is (866) 489-4900.

***** ATTACHMENT NOT DELIVERED *****